

OPTICAL FINGERPRINT SENSOR WITH VARIABLE RESISTORS

Abstract

A fingerprint sensor for sensing a fingerprint has a detecting and processing circuit and a plurality of sensing units. Each of the sensing units has a switch element, a first resistor, and a second resistor. The switch element has a first terminal, a second terminal, and a third terminal. Resistance of the second resistor is fixed. The fingerprint influences an intensity of light illuminating the first resistor so that resistance of the first resistor and a voltage level of the second terminal change. When the switch elements are turned on, the detecting and processing circuit analyzes the fingerprint according to the voltage levels of the second terminals of the plurality switch elements.